CSE 450 – Case Study Performance Evaluation

Treat the six questions in this evaluation like a professional document you would send to an executive team during a post-mortem. Write in complete sentences, using correct grammar and spelling.

\* Please note that the following are not sufficient reasons to justify a score of “above and beyond”:

I / we had to look some stuff up on the internet…

I / we had to read technical documentation…

I / we used a custom color scheme or different chart type in a required visualization…

I / we spent a lot of time figuring out how to complete a requirement…

1. What are some key ideas you learned during this case study related to machine learning and data analysis?

Hyperparameter tuning of gradient boost regression models can be a handy way to improve a model but it is a brute force method that can be computationally very expensive. Something also to be careful with machine learning on data that has many duplicates or many samples of a few values but very few samples of others.

2. If you had additional time to work on this case study, what would you do to take things further?

I would have filtered out rows of materials that are multiples of the same material to validate its generalizability.

**3. Aside from having to learn a new and/or difficult concept, what do you think was the biggest obstacle your team faced during this case study?**

The biggest obstacle for this case study was it being very open ended. Meaning to pursue a machine learning task first, then finding something to apply it to. Whereas previous case studies the goal came first, such as seeking to improve housing, banking, or biking operations as well as predictive text and image recognition. The task of applying the machine learning concepts themselves to the data not too challenging but knowing how to pull the significance out of it and why it is applicable is more challenging without a preliminary goal or purpose.

4. What insights did you gather about learning in general from this module? Could these insights apply to spiritual learning? If so, how?

Although having goals and a clearly defined purpose is very important and valuable, it is also important to be able to demonstrate and apply talents and skills in a variety of situations regardless of how clear or unclear the purpose may be. Likewise with spiritual learning, sometimes the goal is very clearly defined, what is being sought is firm. Other times spiritual lessons don’t manifest their purpose until the end, the faith to continue and the aptitude to apply what you already know along the way is paramount.